

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P296144

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-3000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2427.0 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

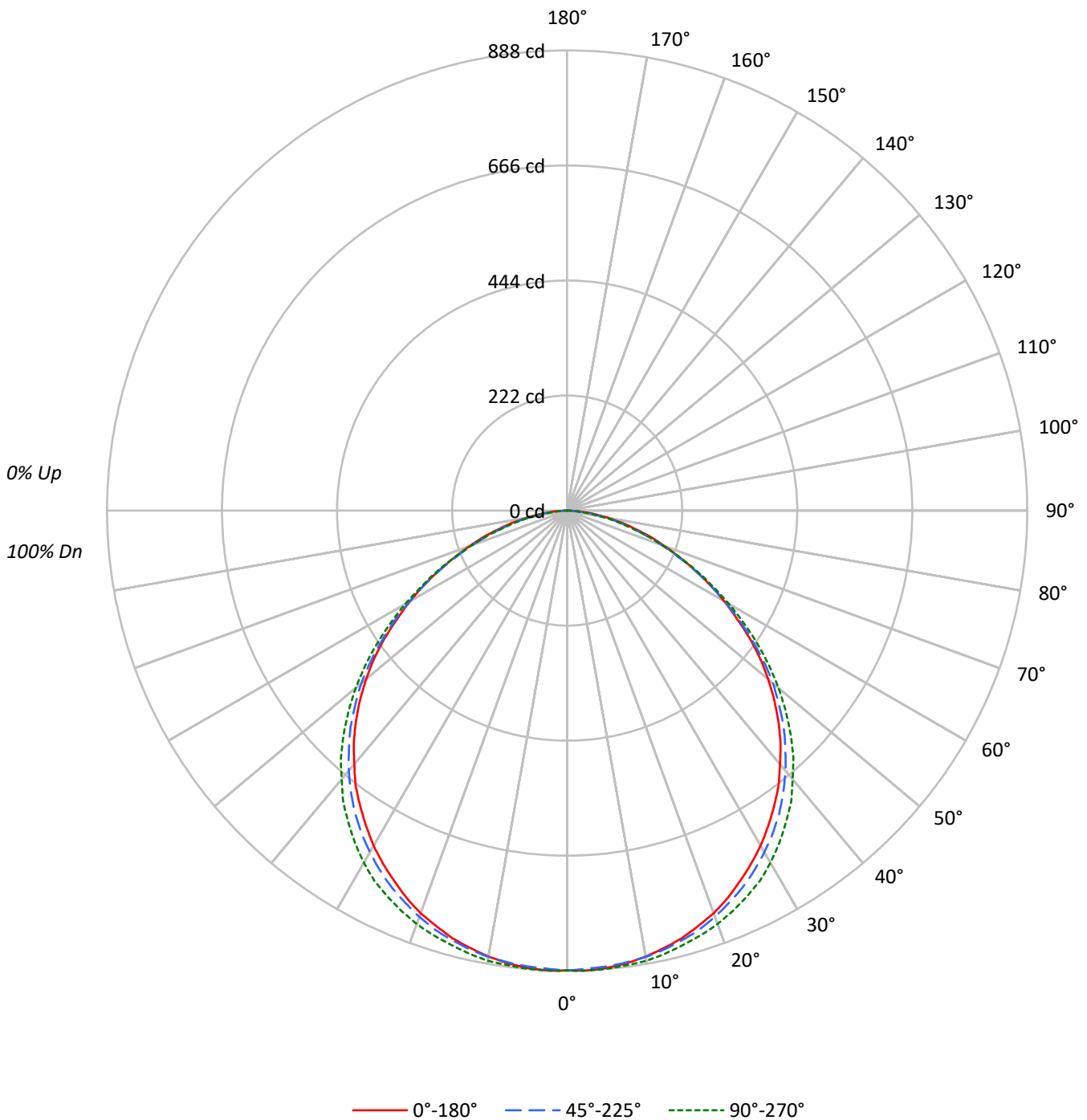
Input Watts (W): 21.018
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1194	1194	1194
5°	1196	1193	1199
10°	1194	1195	1205
15°	1190	1195	1208
20°	1184	1194	1215
25°	1171	1190	1219
30°	1160	1183	1219
35°	1143	1172	1208
40°	1122	1151	1189
45°	1097	1125	1160
50°	1060	1085	1114
55°	1009	1022	1052
60°	942	946	971
65°	865	859	879
70°	786	764	768
75°	699	661	656
80°	607	542	528
85°	497	384	298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	3.5
10°-20°	242.7	10.0
20°-30°	370.4	15.3
30°-40°	446.5	18.4
40°-50°	455.4	18.8
50°-60°	389.7	16.1
60°-70°	268.5	11.1
70°-80°	137.6	5.7
80°-90°	32.0	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	697.2	28.7
0°-40°	1143.8	47.1
0°-60°	1988.9	81.9
0°-90°	2427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2427.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	886	884	883	886	888	84
15°	854	854	858	864	867	241
25°	789	792	802	816	821	364
35°	696	699	714	729	736	435
45°	576	577	591	606	610	444
55°	430	427	436	445	448	384
65°	272	265	270	272	276	270
75°	134	129	127	127	126	145
85°	32	28	25	22	19	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.6	887.6	887.6	887.6	887.6
2.5°	888.5	886.6	884.8	886.6	888.5
5°	885.7	883.9	883.0	885.7	887.6
7.5°	881.1	879.3	879.3	883.0	884.8
10°	873.8	872.8	874.7	878.4	882.0
12.5°	864.5	864.5	867.3	871.9	875.6
15°	854.4	853.5	858.1	864.5	867.3
17.5°	840.6	841.5	848.0	855.3	859.0
20°	826.8	827.7	834.2	844.3	848.9
22.5°	809.3	811.1	818.5	831.4	836.0
25°	789.0	791.8	801.9	815.7	821.3
27.5°	768.8	771.6	782.6	798.3	805.6
30°	746.7	750.4	761.4	778.0	784.4
32.5°	721.8	724.6	738.4	755.0	761.4
35°	696.1	698.8	713.5	729.2	735.6
37.5°	670.3	670.3	685.0	703.4	709.9
40°	639.0	639.9	655.5	673.0	676.7
42.5°	609.5	609.5	623.3	639.9	646.3
45°	576.4	577.3	591.1	605.8	609.5
47.5°	542.3	542.3	554.3	568.1	571.8
50°	506.4	504.5	518.4	529.4	532.2
52.5°	469.6	466.8	477.8	487.1	490.7
55°	430.0	427.2	435.5	444.7	448.4
57.5°	388.5	384.9	394.1	402.3	404.2
60°	349.9	344.3	351.7	356.3	360.9
62.5°	311.2	304.8	310.3	313.0	316.7
65°	271.6	265.2	269.8	271.6	276.2
67.5°	233.9	229.3	230.2	232.9	234.8
70°	199.8	194.3	194.3	194.3	195.2
72.5°	168.5	160.2	159.3	160.2	160.2
75°	134.4	128.9	127.1	127.1	126.1
77.5°	107.7	100.4	99.4	97.6	95.8
80°	78.3	71.8	70.0	69.1	68.1
82.5°	54.3	48.8	47.0	45.1	42.4
85°	32.2	28.5	24.9	22.1	19.3
87.5°	12.0	11.0	9.2	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)